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UNIVERSAL WASTE RULE **329 IAC 3.1-16, incorporating 40 CFR 273**

The Universal Waste Rule is a modification of the Hazardous Waste Rules, enacted under the Resource Conservation and Recovery Act (RCRA), which is designed to reduce regulatory management requirements so as to foster the environmentally sound recycling or disposal of certain specified categories of commonly generated hazardous wastes. This Rule was originally promulgated by the U.S. Environmental Protection Agency as 40 CFR 273, "Standards for Universal Waste Management," and applied to three general categories of widely generated (i.e., "universal") hazardous wastes: (1) waste batteries; (2) certain recalled, obsolete or unused pesticide products; and (3) discarded mercury-containing thermostats. Indiana has incorporated this Rule by reference in the Indiana Administrative Code at 329 IAC 3.1-16, including a fourth universal waste category, hazardous waste lamps, promulgated in the Federal rule on July 6, 1999, and adopted in the Indiana rule on May 4, 2001, to replace the "mercury-containing lamp" category formerly added to the Indiana rule. Effective September 5, 2006, the Indiana Universal Waste Rule further incorporated a broader universal waste category, mercury containing equipment, which was promulgated in the Federal Rule on August 5, 2005. Mercury containing equipment includes mercury-containing thermostats, a separate category in the original Universal Waste Rule.

The effect of the Universal Waste Rule is to reduce the regulatory requirements applying to the handling of these specific wastes, which otherwise would be subject to full hazardous waste regulation under RCRA. This in turn serves as an incentive to channel these wastes into collection and recycling programs, diverting them from less environmentally desirable modes of disposal such as landfilling or incineration.

What are Universal Wastes?

This Rule does not potentially apply unless a waste is first a characteristic or listed hazardous waste by definition under 40 CFR 261. The Rule presently further limits the realm of wastes defined as "universal wastes" to four specific but widely generated categories:

- (1) *Universal waste batteries* - This includes discarded primary (non-rechargeable) and secondary (rechargeable) batteries that contain elements such as cadmium, lead, or mercury, which would render them RCRA-hazardous. Examples are nickel-cadmium (Ni-Cad), sealed lead-acid, or mercury-oxide batteries. Lead-acid batteries (such as automotive batteries) that are generated, transported, or collected to be reclaimed, or regenerated, but not reclaimed where stored, under provisions of 40 CFR 266, Subpart G, "Spent Lead-Acid Batteries Being Reclaimed," do not need to be managed as universal waste. However, waste lead-acid batteries not managed, or eligible for management, under 40 CFR 266, Subpart G, are subject to the Universal Waste Rule requirements. Lead-acid batteries that are stored at facilities that reclaim them are subject to RCRA regulation as specified in 40 CFR 266.80(b).

Many commonly generated waste batteries, such as dry cell zinc-carbon and alkaline ("long life") batteries, typically do not contain appreciable amounts of the hazardous elements of concern, and hence would not be required to be managed as universal waste. However, they may be managed along with universal waste batteries, and this is encouraged in the interest of diverting them from less desirable disposal destinies such as incineration or disposal in solid waste landfills.

- (2) *Universal waste pesticides* - Several classes of discarded pesticides that would otherwise be regulated as characteristic or listed hazardous waste may be eligible for management under the Universal Waste Rule:
 - (a) Stocks of unused suspended or canceled pesticides that are subject to a voluntary or mandatory recall under the section 19(b) of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), or a voluntary recall by a registrant of a pesticide that is not in compliance with FIFRA;
 - (b) Stocks of other unused pesticide products that are collected and managed as part of a waste pesticide collection program.

Pesticides not subject to the prescribed recalls may have to be managed as hazardous waste when discarded. Farmers managing and disposing such pesticides in accordance with the hazardous waste exclusion in 40 CFR 262.70, and complying with prescribed disposal instructions, are not subject to the Universal Waste Rule. Recalled or unused pesticides are not considered waste until a decision to discard them has been made. However, they remain subject to the requirements of FIFRA. Questions concerning the

requirements or applicability of FIFRA to pesticide management should be directed to the Office of the Indiana State Chemist located at Purdue University, phone AC 765 / 494-1492.

- (3) Universal waste mercury containing equipment – This category, added to the Federal Rule at 40 CFR 273 on August 5, 2005, was adopted in the Indiana Universal Waste Rule effective September 5, 2006. It includes devices, items, or articles which contain elemental mercury *that is integral to their functions* and which would otherwise be regulated as a hazardous waste when discarded by virtue of exhibiting the toxicity characteristic (TC) for mercury (hazardous waste code D009). Some examples of such items include mercury-containing thermostats (formerly a separate universal waste category in the original rule), thermometers, barometers, mercury switches, and certain types of meters, regulators, and gauges, in which elemental mercury is contained in ampules or otherwise inclosed and can be managed intact. This category does not include cathode ray tubes or other types of electronic equipment in which elemental mercury is not integral to function, nor does it include mercury waste that is generated as a by-product through the process of manufacturing or treatment.
- (4) Universal waste lamps - This category, added to the Federal Rule at 40 CFR 273 on July 6, 1999, has been adopted in the Indiana Universal Waste Rule to replace the category “universal waste mercury-containing lamps” previously in the Indiana rule. The universal waste lamp category is slightly broader in that it includes lamps that are hazardous for any characteristic, not just for mercury. However, fluorescent light bulbs remain the most common item in this category of universal waste. This category does not include associated light fixture components such as ballasts. Hazardous waste lamps become subject to this rule if they are hazardous waste under 40 CFR 261, and when they are permanently removed from a fixture or determined to be discarded. A note about crushing: In adopting the Federal category of universal waste lamps, the Indiana rule has added a prohibition against intentionally breaking or crushing waste lamps that are managed under the reduced requirements of the Universal Waste Rule. This is a consequence of the interpretation that crushing of hazardous waste bulbs is treatment, which is explicitly prohibited under the Universal Waste Rule (40 CFR 273.11(b) and 273.31(b)). The only circumstance where hazardous waste lamps may be allowed to be crushed is when they are managed as fully regulated hazardous waste (rather than as universal waste) which is treated (i.e., crushed) in tanks or containers by the generator of the waste under the implied generator treatment allowance in 40 CFR 262.34, and in conformance with all applicable hazardous waste management standards.

Any materials resulting from the release or clean-up of spills or breakage of any universal waste is not itself universal waste. It must be determined whether or not such materials are a hazardous waste as identified in 40 CFR 261, and the material must then be managed and disposed in accordance with applicable hazardous or solid waste regulations.

Does the Universal Waste Rule Apply to Me?

This rule is designed to allow for reduced regulatory requirements for the management of the specified wastes that otherwise would have to be managed under the full applicable RCRA hazardous waste management standards. Hence, certain materials that are not originally subject to RCRA do not need to be managed as universal wastes, including:

- materials that are not yet wastes by definition in the hazardous waste rules, including materials not yet permanently removed from service, or for which a decision to discard has not yet been made;
- wastes that are not characteristic or listed hazardous wastes as identified in 40 CFR 261;
- wastes generated by households, which are exempt from hazardous waste regulation under 40 CFR 261.4(b)(1);
- wastes generated by conditionally exempt small quantity hazardous waste generators that qualify for exemption under 40 CFR 261.5.

Persons generating or managing only household or conditionally exempt small quantity generator wastes from the four categories described above may, at their option, manage these wastes as universal wastes. However, when such “exempt” wastes are commingled with universal wastes that are subject to this rule, such as might occur at a universal waste drop-off point provided as a customer service in a retail establishment or in a public or commercial collection program, the commingled waste must be managed in accordance with the Universal Waste Rule.

Wastes managed as universal wastes in accordance with this rule do not have to be counted toward the total amount of hazardous waste generated for purposes of determining hazardous waste generator status (40 CFR 261.5(c)(6)).

Those who manage universal waste that is subject to this rule must comply with certain management standards that depend on whether they are:

- (1) a Small Quantity Handler, which is defined as anyone who accumulates less than 5,000 kilograms, or about

- 11,000 pounds, of universal waste at any time;
- (2) a Large Quantity Handler, which is defined as anyone who accumulates 5,000 kilograms or more (about 11,000 pounds or more) of universal waste at a time;
 - (3) a Universal Waste Transporter, regardless of quantity; and
 - (4) a Destination Facility, which is a treatment/storage/disposal facility subject to TSDF requirements in 40 CFR 264 or 265, or a recycler not engaged in storage who is subject to 40 CFR 261.6(c)(2).

In general, most management standards for Small Quantity Handlers and for Large Quantity Handlers are identical, except in regard to EPA notification requirements (small quantity handlers are not required to notify), employee training, and waste tracking or record keeping (not required for small quantity handlers). Universal waste transporters and destination facilities must comply with requirements (such as DOT regulations or TSDF standards, respectively) that are applicable to their activities. The specific management requirements for these four universal waste management categories are summarized on the following page. For more information, contact IDEM's Office of Land Quality at 317/308-3103, or the IDEM toll-free number 1-800/451-6027.

STANDARDS FOR UNIVERSAL WASTE MANAGEMENT

40 CFR 273, amended by 329 IAC 3.1-16

	SMALL QUANTITY HANDLER accumulate <5,000 kg, or 11,000 lbs, at any time (40 CFR 273, Subpart B)	LARGE QUANTITY HANDLER accumulate 5,000 kg or more at any time (40 CFR 273, Subpart C)
Prohibitions	disposing, diluting, and treating universal waste prohibited (same for both Small and Large Quantity handlers, 40 CFR 273.11 and 273.31)	
Notification	not required (40 CFR 273.12)	EPA notification & ID number required (40 CFR 273.32)
Waste Management	<p>(waste management standards are the same for both Small and Large Quantity handlers)</p> <p><u>batteries</u>: contain leakers / maintain containers closed & in good condition / allowances for management of intact batteries / manage electrolyte & wastes from battery management according to applicable hazardous or solid waste rules (40 CFR 273.13(a) & 273.33(a))</p> <p><u>pesticides</u>: prevent leakage & release / maintain containers or transport vessels closed & in good condition / tank storage meeting specified 40 CFR 265, Subpart J, standards (40 CFR 273.13(b) & 273.33(b))</p> <p><u>mercury-containing equipment</u>: contain leakers / maintain containers closed & in good condition / allowances for removal of mercury-containing ampules with management restrictions / manage residues & wastes from ampule management according to applicable hazardous or solid waste rules (40 CFR 273.13(c) & 273.33(c))</p> <p><u>hazardous waste lamps</u>: intentional crushing or breakage is prohibited (329 IAC 3.1-16-2, amending 40 CFR 273.13(d) & 273.33(d)) / contain lamps in sound, closed containers to prevent breakage / immediately clean up broken lamps and contain in sound, closed containers that prevent contaminant release (40 CFR 273.13(d) & 273.33(d))</p>	
Labeling / Marking	<p>(labeling/marketing requirements are the same for both Small and Large Quantity handlers)</p> <p><u>batteries</u>: universal waste batteries, or the containers holding them, must be clearly marked with one of the following phrases: “Universal Waste--Battery(ies)” or “Waste Battery(ies)” or “Used Battery(ies)” or other words that accurately identify the universal waste batteries (40 CFR 273.14(a) & 273.34(a) amended by 329 IAC 3.1-16-2)</p> <p><u>pesticides</u>: containers (or package units), tanks, transport vehicles or vessels holding:</p> <p>(1) <u>recalled universal waste pesticide</u> must be labeled & marked with both the original product label <u>and</u> the words “Universal Waste--Pesticide(s)” or “Waste Pesticide(s)” (40 CFR 273.14(b) & 273.34(b))</p> <p>(2) <u>unused pesticide products</u> must be labeled & marked the original product label <u>or</u> a label required by the Department of Transportation under 49 CFR 172 <u>or</u> a label designated by a recognized waste pesticide collection program, <u>and</u> the words “Universal Waste--Pesticide(s)” or “Waste Pesticide(s)” (40 CFR 273.14(c) & 273.34(c))</p> <p><u>mercury-containing equipment</u>: universal waste mercury-containing equipment, or the containers holding mercury components from them, must be clearly marked with one of the following phrases: “Universal Waste—Mercury-Containing Equipment” or “Waste Mercury-Containing Equipment” or “Used Mercury-Containing Equipment” or other words that accurately identify the universal waste mercury-containing equipment (including wording specific to universal waste thermostats as required in the original rule) (40 CFR 273.14(d) & 273.34(d) amended by 329 IAC 3.1-16-2)</p> <p><u>lamps</u>: universal waste lamps, or the containers holding them, must be clearly marked with one of the following phrases: “Universal Waste” or “Waste Lamps” or “Used Lamps” or other words that accurately identify the universal waste lamps (40 CFR 273.14(e) & 273.34(e), amended by 329 IAC 3.1-16-2)</p>	
Accumulation Time (Storage)	<p>(accumulation time allowances are the same for both Small and Large Quantity handlers, 40 CFR 273.15 & 273.35)</p> <p>-- universal waste accumulation time allowed is limited to no more than a year from the time of generation or receipt from another universal waste handler; longer time may be allowed <u>solely</u> for accumulating quantities necessary to facilitate proper recovery, treatment, or disposal</p> <p>-- the universal waste handler must be able to demonstrate the length of time of accumulation, either by marking the wastes or containers with the earliest date of accumulation, or by inventory records showing earliest date of accumulation</p>	
Employee Training	must “inform” all employees who handle or are responsible for managing universal waste of proper handling and emergency procedures (40 CFR 273.16)	must “ensure that all employees are thoroughly familiar” with proper waste handling and emergency procedures (40 CFR 273.36)
Response to Releases	<p>(release response obligations are the same for both Small and Large Quantity handlers, 40 CFR 273.17 & 273.37)</p> <p>-- all universal waste handlers must immediately contain all releases of universal wastes and associated residues</p> <p>-- hazardous waste determinations must be made on materials resulting from releases, and managed accordingly</p>	

(table continued on reverse)

	SMALL QUANTITY HANDLER accumulate <5,000 kg, or 11,000 lbs, at any time (40 CFR 273, Subpart B)	LARGE QUANTITY HANDLER accumulate 5,000 kg <u>or more</u> at any time (40 CFR 273, Subpart C)
Off-site Shipments	(off-site shipment requirements are the same for both Small and Large Quantity handlers, 40 CFR 273.18 & 273.38) -- a universal waste handler is restricted to sending universal waste to another universal waste handler, a destination facility, or a foreign destination -- universal waste handlers doing their own shipping must comply with universal waste Transporter requirements -- universal wastes that are hazardous materials under 49 CFR 171 through 180 must comply with DOT shipping requirements (packaging, labeling, marking, placarding, and shipping papers) -- universal waste shipper must secure agreement from the receiving handler to receive shipment -- if a universal waste shipment is rejected, the originating handler must either take the waste back or select with the receiving handler an alternative destination facility -- the recipient of a universal waste shipment may reject all or part of the shipment, if it is either sent back to the originating handler or to an agreed upon alternative destination facility -- if a universal waste handler receives a shipment containing hazardous waste, they must notify the Regional EPA office, providing the name, address, and telephone number of the originator, and receive management instructions from EPA; non-hazardous waste that is not universal waste must be managed in accordance with applicable rules	
Tracking	<u>not</u> required to keep shipment records (40 CFR 273.19)	-- must keep a record (log, invoice, manifest, bill of lading, etc.) of each shipment of universal waste received or shipped off-site, including the following information: (1) name & address of shipment originator or destination (2) quantity & type of universal waste received or sent (3) date the shipment was received or sent -- these records must be retained for at least 3 years (40 CFR 273.39)
Exports	(export requirements are the same for both Small and Large Quantity handlers, 40 CFR 273.20 & 273.40) comply with specified provisions of 40 CFR 262, Subpart E (Exports of Hazardous Waste)	

	UNIVERSAL WASTE TRANSPORTER (40 CFR 273, Subpart D)	DESTINATION FACILITIES (40 CFR 273, Subpart E)
Prohibitions	same as for Small & Large Quantity handlers (40 CFR 273.51)	must comply with applicable RCRA TSDF (Treatment/Storage/Disposal Facility) requirements (40 CFR 264 & 265)
Waste Management	comply with DOT regulations (49 CFR 171-180) <u>note:</u> universal waste is <u>not</u> considered hazardous waste under DOT, but <u>may</u> be regulated as hazardous material (40 CFR 273.52)	
Storage Limits	restricted to <u>10 days or less</u> at a transfer facility (40 CFR 273.53)	
Response to Releases	similar to requirements for Small & Large Quantity handlers (40 CFR 273.54)	
Off-site Shipments	-- delivery restricted to another universal waste handler, a destination facility, or a foreign destination -- comply with DOT regulations (40 CFR 273.55)	-- shipment of universal waste restricted to another universal waste handler, another destination facility, or a foreign destination -- shipment rejection and receipt of hazardous waste protocol similar to Small & Large Quantity handlers (40 CFR 273.61)
Tracking	comply with DOT regulations	similar to Large Quantity handler requirements (40 CFR 273.62)
Exports	requirements at 40 CFR 273.56	not applicable

Notification / Labeling & Marking / Employee Training	none specified in 40 CFR 273 comply with applicable DOT requirements	none specified in 40 CFR 273 comply with applicable RCRA TSDF requirements
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